



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,688	11/25/2003	Ronald L. Hall	200206298-1	6165
22879      7590      03/27/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
DANG, DU Y M				
ART UNIT		PAPER NUMBER		
2624				
NOTIFICATION DATE		DELIVERY MODE		
03/27/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM

mkraft@hp.com

ipa.mail@hp.com

### Office Action Summary

**Application No.**

10/721,688

**Applicant(s)**

HALL ET AL.

**Examiner**

Duy M. Dang

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-7, 9-17 and 21-29 is/are rejected.
- 7) ☒ Claim(s) 5 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Applicant's amendment filed on 12/20/07 has been entered and made of record.
2. The objection to drawings is now withdrawn in view of Applicant's remarks, see page 7 of the response filed 12/20/07.
3. The objection to specification is now withdrawn in view of Applicant's amendment filed 12/20/07.

### ***Response to Arguments***

4. Applicant's arguments, see pages 9-13 of the response, filed 12/20/07, with respect to the rejection(s) of claim(s) 1-29 under section 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sugiura and Maki.

As to Applicant's argument with regard to the rejection of claims 11-17 under section 101, the examiner disagrees and thus remains the rejection. With regard to "optically read media", it refers to "compact discs (CDs), digital versatile discs (DVDs)" as well as paper. This is what "media" is defined as a paper, according to Microsoft Press © Computer Dictionary 2<sup>nd</sup> Edition, Published 1994, page 252.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 11-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 11-17, these claims are directed to “a computer readable medium having a set of executable instructions.” Normally, these claims are considered statutory. However, the instant specification states “Memory 104 can include ROM and/or RAM...optically read media, among others.” at page 7 lines 3-6. The “optically read media” is broadly understood and interpreted as “paper” so such paper or optically read media having a set of executable instructions is considered non-statutory subject matter because paper cannot be employed as a computer component and thus does not impart any functionality. Suggestion to delete such paper from the specification would overcome this rejection.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4, 6-7, 9-11, 14-17 and 21-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugiura (USPN 5,220,417).

Regarding claim 1, Sugiura teaches a method for processing data (see figure 3a), comprising:

defining a number of color channels each channel to transfer a particular color element of a stream of color type pixel data (see figure 2, item 306 of figure 3a and figure 4);

identifying monochrome type pixel data within a data stream that can be represented by a single monochrome base color and shades of the base color (see 312 of figure 3a. Note that the claimed “single monochrome base color and shades of the base color” is inherently included in

Sugiura because it is how monochrome data is defined based on a single base color and shades of that base color which is a gray-scale of that single base color); and

allocating more than one color channels to transfer the identified monochrome type pixel data (see S9 and S14 of figure 9).

Regarding claim 2, Sugiura further teaches wherein the number of color channels equals a number of colors available on a device (see figures 3D and 4. Note that 3 colors RGB and 3 channels for transferring 3 colors R, G, and B).

Regarding claim 3, Sugiura further teaches wherein a number of colors available on a device are allocated to transfer the identified monochrome type pixel data (see rejection of claim 1 above).

Regarding claims 4 and 7, Sugiura further teaches wherein defining a number of color channels includes defining a red data channel, a green data channel, and a blue data channel (see rejection of claim 2 above).

Regarding claim 6, Sugiura teaches sharing a color channel to transfer monochrome type pixel and color type pixel data (see figure 8 and col. 9 lines 18-21: both color and black-and-white originals are transmitted from 603 to 605 via line A and line E); identifying monochrome type pixel data within a data stream (see rejection of claim 1 above); and transferring the identified monochrome type pixel data through the shared channel (see figure 8 and col. 9 lines 18-21: both color and black-and-white originals are transmitted from 603 to 605 via line A and line E).

Regarding claims 9 and 15, Sugiura further teaches Luminosity channel, A-layer channel, and B-layer channel (see figure 4: Note Lab channels inputted to 405).

Regarding claims 10 and 16, Sugiura further teaches Luminosity, Chroma, and Hue (LCH) channels (see col. 8 lines 40-64).

Regarding claim 11, it is noted that this claim recites the limitation of a computer readable medium having a set of executable instructions for causing a device to perform a method steps called for in claim 1. Thus, the rejection of claim 1 above is incorporated herein. Sugiura further teaches using software and microcomputer to realize his/her invention as described at column 14 lines 25-28.

Regarding claim 14, Sugiura Sasaki further teaches wherein the method further comprises processing color type pixel data, transferred through the number of color channels, with a processing module along a color channel (see figures 4 and 6).

Regarding claim 17, Sugiura further teaches allocating the Luminosity channel to transfer monochrome type pixel data (see figures 4 and 6, output of item 405).

Regarding claims 21-22, this claim is also rejected for the same reasons as set forth in claims 11 above.

Regarding claim 23, the advanced statements as applied to other claims set forth above are incorporated herein. Sugiura further allocating at least one of the color type pixel processing channels to transfer the identified monochrome type pixel data (see item 405 of figure 4).

Regarding claim 24, the advanced statements as applied to other claims set forth above are incorporated herein. Sugiura further teaches a numbers of processing modules to process monochrome type pixel data (see 314 and 315 of figure 3a) and bypass color type pixel data through the processing unit unprocessed (see figure 3a: color data is not processed by modules 314 and 315).

Regarding claim 25, the advanced statements as applied to other claims set forth above are incorporated herein. Sugiura further a destination device for receiving processed data from processing unit (see hard disk 316 of figure 3a).

Regarding claim 26, the advanced statements as applied to other claims set forth above are incorporated herein.

Sugiura further teaches memory for storing processed data received from the pipeline (see hard disk 31 of figure 3a) as required by claim 27; a display to receive and display processed pixel data (see col. 12 lines 31-32: liquid-crystal-display) as required by claim 28; and a printer (see printer 302 of figure 3a) as required by claim 29.

***Allowable Subject Matter***

9. Claims 5, 8, and 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten (i)in independent form including all of the limitations of the base claim and any intervening claims and (ii)to overcome the 101 rejection set forth above.

10. Claims 18-20 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5, the cited prior art fails to teach or suggest the claimed features as recited at lines 2-3.

Regarding claim 8, the cited prior art fails to teach or suggest the claimed features recited at line 2.

Regarding claim 12, the cited prior art fails to teach or suggest the claimed features recited at lines 2-4. Likewise, claim 13 depends from claim 12 and thus is allowable as well.

Regarding claim 18, the cited prior art fails to teach or suggest the claimed features recited at lines 4-11. Likewise, claims 19-20 depend from claim 18 and thus allowed as well..

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 6:00AM to 2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dmd  
3/08

/Duy M Dang/  
Primary Examiner, Art Unit 2624